

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

SB608
.P6556

SOUTHEASTERN AREA

SOUTHERN PINE BEETLE OUTBREAK STATUS

July 1974



Compiled By
U. S. Forest Service
SOUTHEASTERN AREA
State and Private Forestry
Atlanta, Georgia

PRESENT STATUS
CURRENT SERIAL NUMBER

NOV 5 '74

U.S. DEPT. OF AGRICULTURE
NATL. AGRI. LIBRARY
RECEIVED

For Further Information Contact:

Forest Pest Management
U.S. Forest Service
1720 Peachtree Street, NW Room 711
Atlanta, Georgia 30309
Telephone 404-526-4986

Chin address

FY 1974 OUTBREAK STATISTICS

Ownership	Infested Volume Salvaged		Funds Expended \$	Acreage Treated ^{1/} acres
	MBF	MCF		
State & Private	126,990	48,175	\$ 2,033,182 ^{2/}	74,765 ^{3/}
Federal	35,626	3,108	\$ 445,463	8,425
SA Total	162,616	51,283	\$ 2,478,645	83,190

^{1/} Estimated combined total acreage of salvaged infested, piled and burned, and chemically treated trees.

^{2/} Total of \$1,100,966 Federal and \$932,216 State and private funds.

^{3/} Salvage treatment acreage calculated from salvage volumes at 800 cubic feet per acre; acreages for pile and burn and chemical treatment are not included for State and private lands.

OUTLOOK FOR FY 1975

Ownership	Total Acreage of Susceptible Host Type in SA ^{4/}	Net Acreage of Host Type in Outbreak	Federal Funds Requested for Control Projects	Anticipated Infested Volume to be Salvaged	
	Acres	Acres	\$	MBF	MCF
State & Private	77,340,400	47,305,358	\$ 1,324,690	70,762	57,570
Federal	7,842,800	2,512,934	604,520	38,561	75
SA Total	85,183,200	49,818,292	1,929,210	109,323	57,645

^{4/} Includes susceptible host type acreage in Kentucky, Florida, and Oklahoma not currently within the outbreak area.

States with Cooperative Suppression Projects - 9

Alabama	Louisiana	South Carolina
Arkansas	Mississippi	Texas
Georgia	North Carolina	Virginia

Federal Administrative Units with Suppression Projects

National Forests in North Carolina

Chattahoochee-Oconee National Forests, Georgia

Jefferson National Forest, Virginia

National Forests in Texas

Francis Marion and Sumter National Forests, South Carolina

Kisatchie National Forest, Louisiana

National Forests in Alabama

National Forests in Mississippi

Cherokee National Forest, Tennessee

Oak Ridge National Lab, Atomic Energy Commission, Tennessee

George Washington National Forest, Virginia

SUMMARY

Approximately 58 percent of the 85.2 million acres of susceptible pine forests in the 13 Southeastern States are currently included in the outbreak.

The intensity of the outbreak, expressed in numbers of counties involved, increased slightly in Texas and Arkansas (gain of 6 counties); decreased in Louisiana, Mississippi, and Alabama (reduction by 17 counties); and increased dramatically in Georgia, South Carolina, North Carolina, and Virginia (gain of 43 counties) for a net increase of 32 counties. A total of 347 counties are included within the outbreak boundary.

U.S. Forest Service entomologists forecast a continuing intensification of the outbreak in the Georgia to Virginia area and a reduction in the Alabama to Texas region over the next 6 months.

APPENDIX

TABLE 1. Area of Susceptible Host Types in the Southeast by Ownership Class. ^{1/}
(thousand acres)

State	Ownership	Loblolly	Shortleaf	Forest Types				Oak Pine	Pond	Virginia	Table Mtn.	Longleaf		Total
				Shortleaf	Pitch	Southern Pine ^{2/}						Slash		
Alabama	Private	--	--	7,132.3	--	--		4,614.5	--	--	--	1,854.4		13,601.2
	Public	--	--	305.5	--	--		220.4	--	--	--	144.3		670.2
	Total	--	--	7,437.8	--	--		4,834.9	--	--	--	1,998.7		14,271.4
Arkansas	Private	--	--	2,982.5	--	--		2,466.6	--	--	--	--		5,449.1
	Public	--	--	685.5	--	--		573.0	--	--	--	--		1,258.5
	Total	--	--	3,668.0	--	--		3,039.6	--	--	--	--		6,707.6
Florida	Private	339.9	34.5	--	--	--		1,365.0	261.8	--	--	--		2,001.2
	Public	4.5	--	--	--	--		303.3	81.8	--	--	--		389.6
	Total	344.4	34.5	--	--	--		1,668.3	343.6	--	--	--		2,390.8
Georgia	Private	4,818.4	1,637.9	--	--	--		3,350.7	285.0	265.0	--	--		10,357.0
	Public	256.3	97.4	--	--	--		289.2	19.5	35.4	--	--		697.8
	Total	5,074.7	1,735.3	--	--	--		3,639.9	304.5	300.4	--	--		11,054.8
Kentucky	Private	--	--	--	--	326.2		443.5	--	--	--	--		769.7
	Public	--	--	--	--	41.5		113.9	--	--	--	--		155.4
	Total	--	--	--	--	367.7		557.4	--	--	--	--		925.1
Louisiana	Private	--	--	4,161.4	--	--		2,034.4	--	--	--	1,068.6		7,264.4
	Public	--	--	277.9	--	--		135.0	--	--	--	151.5		564.4
	Total	--	--	4,439.3	--	--		2,169.4	--	--	--	1,220.1		7,828.8
Mississippi	Private	--	--	3,718.8	--	--		2,969.8	--	--	--	1,051.6		7,740.2
	Public	--	--	523.8	--	--		402.2	--	--	--	283.8		1,209.8
	Total	--	--	4,242.6	--	--		3,372.0	--	--	--	1,335.4		8,950.0
North Carolina	Private	3,009.6	1,037.1	--	32.9	--		3,326.4	1,181.0	780.2	4.2	--		9,371.4
	Public	111.7	42.6	--	13.0	--		230.2	227.6	8.9	14.7	--		648.7
	Total	3,121.3	1,079.7	--	45.9	--		3,556.6	1,408.6	789.1	18.9	--		10,020.1
Oklahoma	Private	--	--	675.6	--	--		568.2	--	--	--	--		1,243.8
	Public	--	--	119.7	--	--		96.1	--	--	--	--		215.8
	Total	--	--	795.3	--	--		664.3	--	--	--	--		1,459.6
South Carolina	Private	2,588.9	772.9	--	4.6	--		1,970.8	344.7	151.7	--	--		5,833.6
	Public	327.6	101.2	--	--	--		154.0	40.7	10.9	--	--		634.4
	Total	2,916.5	874.1	--	4.6	--		2,124.8	385.4	162.6	--	--		6,468.0
Tennessee	Private	--	--	847.8	--	--		598.7	--	--	--	--		1,446.5
	Public	--	--	151.0	--	--		199.3	--	--	--	--		350.3
	Total	--	--	998.8	--	--		1,198.0	--	--	--	--		2,196.8
Texas	Private	--	--	4,315.0	--	--		2,241.9	--	--	--	347.9		6,904.8
	Public	--	--	593.7	--	--		64.2	--	--	--	10.6		668.5
	Total	--	--	4,908.7	--	--		2,306.1	--	--	--	358.5		7,573.3
Virginia	Private	1,077.6	323.8	--	52.4	--		2,326.8	2.6	1,174.4	19.9	--		4,957.5
	Public	38.3	15.2	--	31.2	--		210.5	--	71.3	12.9	--		379.4
	Total	1,115.9	339.0	--	63.6	--		2,537.3	2.6	1,245.7	32.8	--		5,336.9
Total	Private	11,834.4	3,806.2	23,833.4	69.9	326.2		28,677.3	2,075.1	2,371.3	24.1	4,322.5		77,340.4
	Public	738.4	256.4	2,657.1	44.2	41.5		2,991.3	369.6	126.5	27.6	590.2		7,842.8
	All													
Ownership		12,572.8	4,062.6	26,490.5	114.1	367.7		31,668.6	2,444.7	2,497.8	51.7	4,912.7		85,183.2

^{1/} Data extracted from U.S. Forest Service Resource Bulletins published by the Southern & Southeastern Forest Experiment Stations.

^{2/} Forests in which 50% or more of the stocking is in shortleaf or other southern yellow pines singly or in combination.

Table 2.

SITUATION AND ACCOMPLISHMENT 1972 - 1974

State	Ownership	FY 1972				FY 1973				FY 1974			
		Gross Outbreak Area 1/	Federal Funds Expended \$	Infested Volume Salvaged MBF	MCF	Gross Outbreak Area 1/	Federal Funds Expended \$	Infested Volume Salvaged MBF	MCF	Gross Outbreak Area 1/	Federal Funds Expended \$	Infested Volume Salvaged MBF	MCF
Alabama	Private Federal Total	--- 203,000 203,000	--- 13,293 13,293	--- 804 804	--- --- ---	15,000,000 500,000 15,500,000	500,000 180,064 680,064	66,722 6,194 72,916	20,377 502 20,839	15,000,000 1,270,240 16,270,240	475,000 74,658 549,658	28,843 1,815 30,658	12,670 185 12,855
Arkansas	Private Federal Total	--- --- ---	--- --- ---	--- --- ---	--- --- ---	645,000 --- 645,000	22,952 --- 22,952	879 --- 879	188 --- 188	1,336,000 --- 1,336,000	21,285 --- 21,285	341 --- 341	160 --- 160
Georgia	Private Federal Total	2,000,000 296,690 2,296,690	988 10,960 11,948	290 4,767 5,057	--- --- ---	9,200,000 700,000 9,900,000	38,000 51,396 89,396	3,920 6,431 10,351	2,717 628 3,345	9,018,130 1,336,132 10,354,262	96,000 50,124 146,124	31,282 3,937 35,219	13,099 315 13,414
Louisiana	Private Federal Total	4,000,000 561,000 4,561,000	26,000 60,630 86,630	16,000 6,550 22,550	450 --- 450	7,500,000 600,000 8,100,000	285,000 59,894 344,894	17,826 2,742 20,568	2,668 411 3,079	6,800,000 1,017,287 7,817,287	100,000 32,000 132,000	1,292 820 2,112	158 33 191
Mississippi	Private Federal Total	--- 188,615 188,615	--- 17,168 17,168	--- 3,000 3,000	--- --- ---	1,600,000 200,000 1,800,000	44,960 50,034 94,994	240 2,513 2,753	518 10 528	1,652,600 373,497 2,026,097	56,210 36,618 92,828	830 3,351 4,181	451 0 451
North Carolina	Private Federal Total	4,327,717 631,220 4,958,937	9,579 21,110 30,689	21,025 900 21,925	--- --- ---	6,700,000 600,000 7,300,000	62,841 41,448 104,289	20,143 2,012 22,155	2,351 110 2,461	13,500,000 2,752,430 16,252,430	110,471 33,000 143,471	41,833 2,459 44,292	6,431 705 7,136
South Carolina	Private Federal Total	514,000 481,479 995,479	--- 22,070 22,070	--- 2,767 2,767	113 --- 113	3,600,000 1,300,000 4,900,000	--- 55,183 55,183	544 2,902 3,446	558 814 1,372	3,900,000 1,474,444 5,249,444	47,500 35,250 82,750	5,101 3,120 8,221	10,725 377 11,102
Tennessee	Private Federal Total	--- 50,000 50,000	--- 15,700 15,700	--- 579 579	--- --- ---	--- 80,000 80,000	--- 22,350 22,350	--- 341 341	--- 69 69	1,714,984 338,136 2,053,120	--- 27,068 27,068	676 620 1,296	9 121 130
Texas	Private Federal Total	6,200,000 80,000 6,280,000	45,000 4,800 49,800	2,000 300 2,300	--- --- ---	8,000,000 700,000 8,700,000	165,000 56,924 221,924	28,000 4,847 32,847	811 185 996	8,000,000 1,716,967 9,716,967	185,000 140,835 325,835	4,941 17,004 21,945	381 643 1,024
Virginia	Private Federal Total	--- --- ---	--- --- ---	--- --- ---	--- --- ---	4,600,000 71,485 4,671,485	--- 9,460 9,460	6,000 180 6,180	2,700 497 3,197	6,889,600 3,689 6,963,289	9,500 15,910 25,410	11,326 2,500 13,826	4,090 729 4,819
SA TOTALS	Private Federal Total	17,041,717 2,492,004 19,533,721	\$ 81,567 \$ 165,731 \$ 247,298	39,315 19,667 58,982	563 --- 563	56,845,000 4,751,485 61,596,485	\$ 1,118,753 \$ 526,753 \$ 1,645,506	144,274 28,162 172,436	32,848 3,226 36,074	67,686,314 10,352,822 78,039,136	\$ 1,100,966 \$ 445,463 \$ 1,546,429	126,990 35,626 162,616	48,175 3,108 51,283

1/ Total acreage of all counties within outbreak area. See Table 4.

Table 3. OUTLOOK FOR SOUTHERN PINE BEETLE SITUATION IN SOUTHEASTERN AREA FOR FY 1975

State	Ownership	Federal Funds Requested	Anticipated Infested Volume to be Salvaged <u>MBF</u>	<u>MCF</u>	Total Acreage of Host Type	Net Acreage of Host Type in Current Outbreak	Current Status and Course of Outbreak
Alabama	Private Federal Total	\$ 500,000 79,247 579,247	14,762 2,925 17,687	--- --- ---	13,601,200 670,200 14,271,400	9,888,400 636,712 10,525,112	Populations have shifted to the East Central and Northeast. The normal summer increase in number of spots is occurring but is not expected to reach 1973 levels.
Arkansas	Private Federal Total	25,190 ^{1/} --- 25,190	--- --- ---	385 --- 385	5,449,100 1,258,500 6,707,600	938,900 --- 938,900	Infestations are intensifying within the outbreak area and are gradually moving to the Northeast. No major buildup is expected.
Georgia	Private Federal Total	215,000 52,000 267,000	--- 5,950 5,950	36,450 --- 36,450	10,357,000 697,800 11,054,800	6,398,820 176,257 6,575,077	Populations are at relatively high levels. Infestations are 32% higher than in 1973. Damage has increased rapidly in the Savannah area since February 1974, when first detected.
Louisiana	Private Federal Total	75,000 ^{1/} 48,400 123,400	--- 1,000 1,000	505 --- 505	7,264,400 564,400 7,828,800	4,800,300 322,400 5,122,700	Statewide, populations are low. Allen and Calcasieu Parishes are experiencing large infestations but beetles are not expected to reach outbreak proportions this summer.
Mississippi	Private Federal Total	65,000 ^{1/} 61,824 126,824	200 4,500 4,700	180 --- 180	7,740,200 1,209,800 8,950,000	2,056,400 250,242 2,306,642	Infestation levels appear to be declining slightly and no major buildup is expected.
North Carolina	Private Federal Total	190,000 ^{1/} 38,500 228,500	50,000 1,830 51,830	7,800 --- 7,800	9,371,400 648,700 10,020,100	8,171,964 116,714 8,288,678	Conditions are the worst in 15 years. An estimated 13,500 spots Statewide reflect a 100% increase in activity since the winter/spring surveys. Many new counties are now involved.
South Carolina	Private Federal Total	40,000 31,500 71,500	--- 5,000 5,000	4,062 --- 4,062	5,833,600 634,400 6,468,000	5,765,458 292,554 6,058,012	The outbreak has moved from the upper Piedmont, where it is lessening in intensity, to the lower Piedmont, Central, and lower Coastal Plain Regions where it appears to be on the upswing.
Tennessee	Private Federal Total	--- 10,200 10,200	300 400 700	7 --- 7	1,846,500 350,300 2,196,800	741,646 135,244 876,890	Scattered spots present in all infested counties. Infestations in the mountainous areas of Cocke County are expanding at a rapid rate.
Texas	Private Federal Total	200,000 247,849 447,849	--- 14,956 14,956	5,181 --- 5,181	6,904,800 668,500 7,573,300	5,788,463 556,537 6,345,000	Most of the State has shown an increase in the number of spots compared to 1973. A decline in number of spots is expected during the remainder of 1974.
Virginia	Private Federal Total	14,500 35,000 49,500	5,500 2,000 7,500	3,000 75 3,075	4,957,500 379,400 5,336,900	2,755,007 26,274 2,781,281	At high static levels in the central Piedmont, new highs in portions of Isle of Wight, Nansemond and Sussex Counties, and on upswing in other southern Coastal Plain Counties.
SA TOTALS	Private Federal Total	1,324,690 604,520 1,929,210	70,762 38,561 109,323	57,570 75 57,645	73,325,700 7,082,000 80,407,700	47,305,358 2,512,934 49,818,292	

^{1/} Anticipated request; proposal not received by August 9, 1974.

Table 4. Southern Pine Beetle Outbreak Intensity, July 1974.

State	Total Number of Counties in State	Number of Counties w/Susceptible Host Type in State ^{1/}	Number of Infested Counties in Current Outbreak		
			Jul 73	Jan 74	Jul 74
Alabama	67	66	53	53	50
Arkansas	75	47	4	2	4
Georgia	159	158	58	56	70
Louisiana	64	38	31	31	21
Mississippi	82	69	17	18	14
North Carolina	100	100	60	71	81
South Carolina	46	46	22	22	26
Tennessee	95	55	10	13	13
Texas	254	44 ^{2/}	22	22	26
Virginia	98	87	26	27	42
SA Total	1040	710	303	315	347

^{1/} Susceptible host types include loblolly, shortleaf, pitch, pond, Virginia, table mountain, longleaf, and slash pines.

^{2/} East Texas counties only.

FIGURE 1 CHRONOLOGICAL DEVELOPMENT OF THE SOUTHERN PINE BEETLE OUTBREAK FY 1971 - FY 1974



SOUTHEASTERN AREA

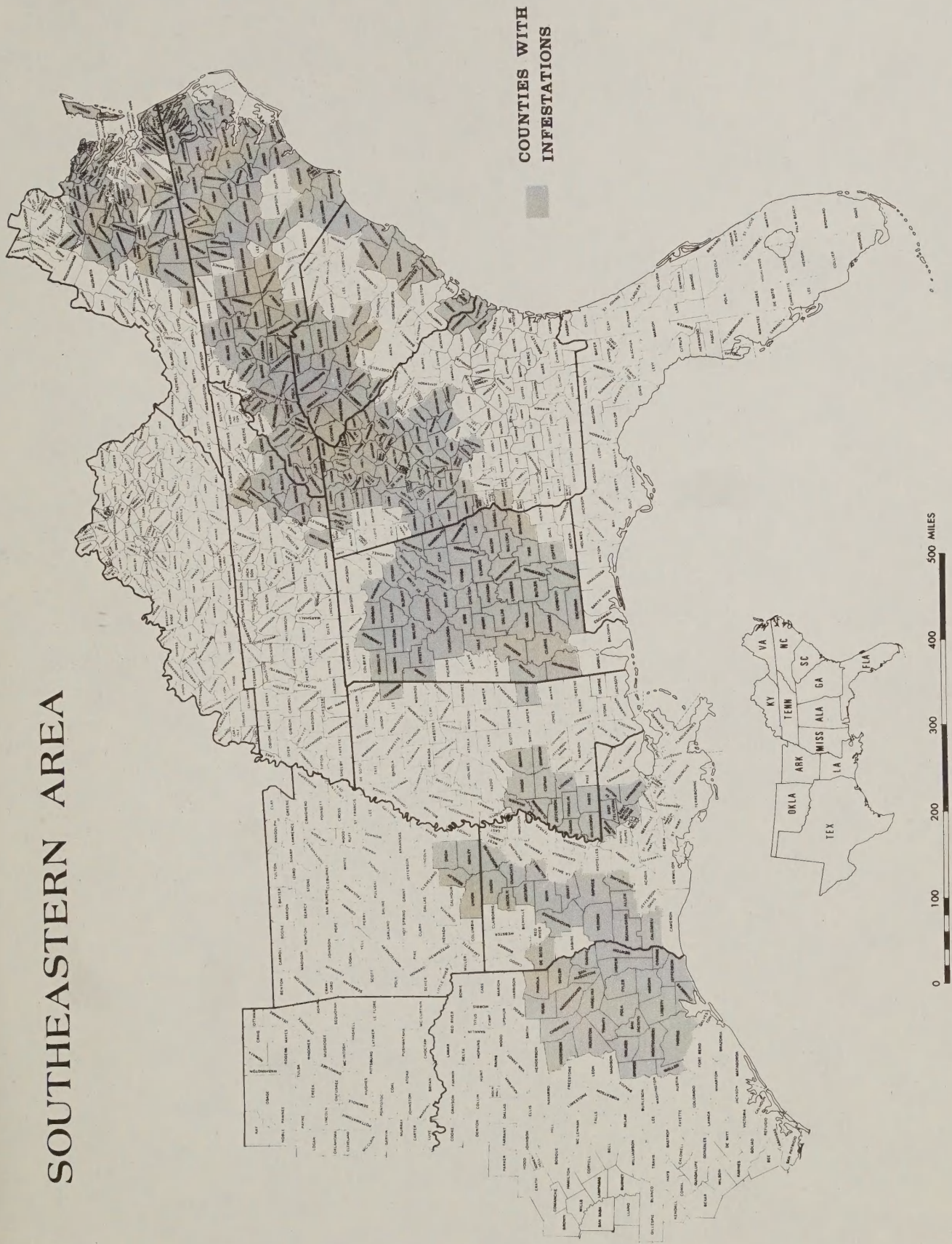


FIGURE 2 FY 1975 LOCATION OF SOUTHERN PINE BEETLE OUTBREAK, SOUTHEASTERN AREA

